

What is Claimed is:

1. A mobile communication device comprising infrastructure capable of processing streamed multimedia data in a single threaded operating environment, said single threaded operating environment being adapted to process the streamed multimedia data in a virtual multithreaded mode using a slide show format.

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2. The mobile communication device of claim 1, wherein said infrastructure comprises at least one central processing unit (CPU) being used to download images and associated sound clips, said downloaded images and associated sound clips being part of a multimedia data stream; at least one operating system (OS) operatively coupled to said at least one CPU, said at least one CPU being utilized to display said downloaded images; and at least one digital signal processor (DSP) operatively coupled to said at least one CPU and adapted for audio processing of said associated downloaded sound clips.

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3. The mobile communication device of claim 2, wherein said infrastructure further comprises at least one high level application operatively coupled to said at least one CPU and being adapted to directly access said at least one DSP and run under the auspices of said at least one OS.

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4. The mobile communication device of claim 3, wherein said at least one high level application is adapted to instruct said at least one CPU to display a first downloaded image in slide show format, hand over audio processing of its associated downloaded first sound clip to said at least one DSP, and immediately download a successive image and associated successive sound clip to create the appearance of processing said multimedia data stream in a multithreaded mode.

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5. The mobile communication device of claim 4, wherein said at least one high level application is adapted to monitor said at least one DSP to determine if audio processing of said downloaded first sound clip is complete.

6. The mobile communication device of claim 4, wherein said at least one CPU includes a CPU clock.

7. The mobile communication device of claim 6, wherein said at least one high level application is adapted to monitor said CPU clock to determine when to instruct said at least one CPU to display said downloaded successive image.

8. The mobile communication device of claim 2, wherein said infrastructure further comprises at least one high level application operatively coupled to said at least one CPU and being adapted to directly access said at least one DSP and run parallel to said at least one OS.

9. The mobile communication device of claim 8, wherein said at least one high level application is adapted to instruct said at least one CPU to display a first downloaded image in slide show format, hand over audio processing of its associated downloaded first sound clip to said at least one DSP, and immediately download a successive image and associated successive sound clip to create the appearance of processing said multimedia data stream in a multithreaded mode.

10. The mobile communication device of claim 9, wherein said at least one high level application is adapted to monitor said at least one DSP to determine if audio processing of said downloaded first sound clip is complete.

11. The mobile communication device of claim 9, wherein said at least one CPU includes a CPU clock.

12. The mobile communication device of claim 11, wherein said at least one high level application is adapted to monitor said CPU clock to determine when to instruct said at least one CPU to display said downloaded successive image.

13. A method for processing streamed multimedia data, said method comprising the steps of:

- (a) utilizing at least one central processing unit (CPU) to download an image and an associated sound clip, said downloaded image and sound clip being part of a multimedia data stream;
- (b) utilizing said at least one CPU to display said downloaded image in a slide show format;

- 10 (c) handing over audio processing of said downloaded sound clip to at least one digital signal processor (DSP) to free up said at least one CPU to download a successive image and a successive associated sound clip;
- (d) monitoring said at least one DSP to determine if audio processing of said downloaded sound clip is complete; and
- 15 (e) repeating steps (b) – (d), if audio processing of said downloaded sound clip is complete, to create the appearance of processing said multimedia data stream in a multithreaded mode.

14. A method for processing streamed multimedia data, said method comprising the steps of:

- 5 (a) utilizing at least one central processing unit (CPU) to download an image and an associated sound clip, said downloaded image and sound clip being part of a multimedia data stream;
- (b) utilizing said at least one CPU to display said downloaded image in a slide show format, said at least one CPU having a CPU clock;
- 10 (c) handing over audio processing of said downloaded sound clip to at least one digital signal processor (DSP) to free up said at least one CPU to download a successive image and a successive associated sound clip;
- (d) monitoring said CPU clock to determine when to instruct said at least one CPU to display said downloaded successive image; and
- (e) repeating steps (b) – (d) to create the appearance of processing said multimedia data stream in a multithreaded mode.

15 15. The method of claim 13, further comprising the step of terminating the processing of said multimedia data stream if said at least one CPU fails to download at least one successive image.

16. The method of claim 14, further comprising the step of terminating the processing of said multimedia data stream if said at least one CPU fails to download at least one successive image.

17. An apparatus for processing streamed multimedia data, comprising:
- (a) at least one central processing unit (CPU) being used to download images and associated sound clips, said downloaded images and associated sound clips being part of a multimedia data stream, said at least one CPU being utilized to display said downloaded images;
 - (b) at least one operating system (OS) operatively coupled to said at least one CPU;
 - (c) at least one digital signal processor (DSP) operatively coupled to said at least one CPU and adapted for audio processing of said associated downloaded sound clips; and
 - (d) at least one high level application operatively coupled to said at least one CPU and adapted to directly access said at least one DSP and run under the auspices of said at least one OS, said at least one high level application being adapted to instruct said at least one CPU to display a first downloaded image in a slide show format, hand over audio processing of a first associated downloaded sound clip to said at least one DSP, immediately download a successive image and associated successive sound clip, monitor said at least one DSP to determine if audio processing of said first downloaded sound clip is complete, and display said downloaded successive image, if audio processing of said first downloaded sound clip is complete, to create the appearance of processing said multimedia data stream in a multithreaded mode.

18. The apparatus of claim 17, wherein said at least one high level application is adapted to terminate processing of said multimedia data stream if said at least one CPU fails to download at least one successive image.

19. An apparatus for processing streamed multimedia data, comprising:
- (a) at least one central processing unit (CPU) being used to download images and associated sound clips, said downloaded images and associated sound clips being part of a multimedia data stream, said at least one CPU being utilized to display said downloaded images;
 - (b) at least one operating system (OS) operatively coupled to said at least one CPU;

10 (c) at least one digital signal processor (DSP) operatively coupled to said at least one CPU and adapted for audio processing of said associated downloaded sound clips; and

15 (d) at least one high level application operatively coupled to said at least one CPU and adapted to directly access said at least one DSP and run parallel to said at least one OS, said at least one high level application being adapted to instruct said at least one CPU to display a first downloaded image in a slide show format, hand over audio processing of a first associated downloaded sound clip to said at least one DSP, immediately download a successive image and associated successive sound clip, monitor said at least one DSP to determine if audio processing of said first downloaded sound clip is complete, and display said downloaded successive image, if audio processing of said first downloaded sound clip is complete, to
20 create the appearance of processing said multimedia data stream in a multithreaded mode.

20. The apparatus of claim 19, wherein said at least one high level application is adapted to terminate processing of said multimedia data stream if said at least one CPU fails to download at least one successive image.

21. An apparatus for processing streamed multimedia data, comprising:

5 (a) at least one central processing unit (CPU) being used to download images and associated sound clips, said downloaded images and associated sound clips being part of a multimedia data stream, said at least one CPU being utilized to display said downloaded images;

(b) at least one operating system (OS) operatively coupled to said at least one CPU, said at least one CPU having a CPU clock;

10 (c) at least one digital signal processor (DSP) operatively coupled to said at least one CPU and adapted for audio processing of said associated downloaded sound clips; and

(d) at least one high level application operatively coupled to said at least one CPU and adapted to directly access said at least one DSP and run under the auspices of said at least one OS, said at least one high level application being adapted to instruct said at least one CPU to display a first downloaded image in a slide show format,

15 hand over audio processing of a first associated downloaded sound clip to said at
least one DSP, immediately download a successive image and associated
successive sound clip, monitor said CPU clock to determine when to instruct said
at least one CPU to display said downloaded successive image, and display said
downloaded successive image to create the appearance of processing said
20 multimedia data stream in a multithreaded mode.

22. The apparatus of claim 21, wherein said at least one high level application is adapted
to terminate processing of said multimedia data stream if said at least one CPU fails to
download at least one successive image.

23. An apparatus for processing streamed multimedia data, comprising:

- 5 (a) at least one central processing unit (CPU) being used to download images and
associated sound clips, said downloaded images and associated sound clips being
part of a multimedia data stream, said at least one CPU being utilized to display
said downloaded images;
- (b) at least one operating system (OS) operatively coupled to said at least one CPU,
said at least one CPU having a CPU clock;
- 10 (c) at least one digital signal processor (DSP) operatively coupled to said at least one
CPU and adapted for audio processing of said associated downloaded sound clips;
and
- (d) at least one high level application operatively coupled to said at least one CPU and
adapted to directly access said at least one DSP and run parallel to said at least one
OS, said at least one high level application being adapted to instruct said at least
15 one CPU to display a first downloaded image in a slide show format, hand over
audio processing of a first associated downloaded sound clip to said at least one
DSP, immediately download a successive image and associated successive sound
clip, monitor said CPU clock to determine when to instruct said at least one CPU
to display said downloaded successive image, and display said downloaded
successive image to create the appearance of processing said multimedia data
20 stream in a multithreaded mode.

24. The apparatus of claim 23, wherein said at least one high level application is adapted to terminate processing of said multimedia data stream if said at least one CPU fails to download at least one successive image.

25. A system for processing streamed multimedia data comprising at least one high level application operatively coupled between at least one central processing unit (CPU) and at least one digital signal processor (DSP) and adapted to run under the auspices of at least one operating system (OS), said at least one high level application being adapted to instruct said at least one CPU, by way of said at least one OS, to display a downloaded image, hand over audio processing of an associated downloaded sound clip to said at least one DSP, and immediately download a successive image and associated successive sound clip to create the appearance of processing the streamed multimedia data in a multithreaded mode.

26. A system for processing streamed multimedia data comprising at least one high level application operatively coupled between at least one central processing unit (CPU) and at least one digital signal processor (DSP) and adapted to run parallel to at least one operating system (OS), said at least one high level application being adapted to instruct said at least one CPU, bypassing said at least one OS, to display a downloaded image, hand over audio processing of an associated downloaded sound clip to said at least one DSP, and immediately download a successive image and associated successive sound clip to create the appearance of processing the streamed multimedia data in a multithreaded mode.